



SHOPPING



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2 Dior #248	250	250 size
3 Chate	500	500 size

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BANKING

FIRST NATIONAL		BALANCE		NATIONAL BANK	
Arthur & S CHECKING.....	\$ 2,6	Carol Wilson			
ACCOUNT CAROL'S CHECKING.....	\$ 1,	BALANCE			
Art's Che SAVINGS.....	\$ 7,				
Carol's ISA CREDIT.....	\$	Checking.....	2,636.25		
Savings		Checking....	1,052.40		
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NEWS

Los Angeles Times

State Weather
Conditions
at 1 p.m.

San Francisco
76° cloudy

SPORTS

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NEWSNEWS

NEWSNEWS

Explode In Gu

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No Change Expect

ELECTRONIC MAIL

Sender: CATHY ANDREWS

Subject: CHARGE!

CHARGE! DID YOU CE

SANDCASTLES? LET

DESERVED DAY OFF

THING DAZZLING

BRING PLENTY OF

Electronic M

Read Your Mail

Write a Letter

Exchange

Personal Lib

THE GROCER

- JUNE 28

PAPER GOODS

TOWELS, LARGE ROLL,

CH, NO LIMIT.



TIMES MIRROR VIDEOTEX SERVICES

News Release



Times Mirror Videotex Services
3100 South Harbor Boulevard
Suite 200
Santa Ana, CA 92704
714/540-2515

Release Date:

Contact:

TIMES MIRROR VIDEOTEX SERVICES and GATEWAYSM

CAPSULE DESCRIPTION

Times Mirror Videotex Services (TMVS), based in Santa Ana, California, is one of the nation's pioneers in videotex, a two-way, home information, transaction, education and entertainment system.

Formed in 1981 to explore the viability of this new medium, TMVS will launch GATEWAY, a commercial, in-home videotex service, in a portion of Orange County, California, during mid-1984. The decision to introduce GATEWAY is based on overwhelmingly positive results of the industry's most comprehensive field trial, conducted in Southern California for nine months in 1982.

Subscribers to GATEWAY will be among the first in the nation to benefit from this specialized medium that combines words and graphics into an almost unlimited number of pages, or screens of information, delivered to subscribers over telephone lines and displayed on their television sets.

GATEWAY will afford subscribers the opportunity to shop, bank, purchase theater tickets, book airline reservations, keep up-to-date on late-breaking news, read restaurant or movie reviews, communicate with other subscribers and play educational games in the convenience of their own homes.

(more)

Times Mirror Videotex Services is a wholly-owned subsidiary of The Times Mirror Company, which publishes metropolitan daily newspapers across the country, owns seven network affiliate television stations and is the seventh largest cable television operator in the United States. Other operating units include book and magazine publishing, graphic arts supplies, information services and newsprint and forest products.

BRIEF HISTORY

In the Fall of 1980, The Times Mirror Company began to explore an emerging new technology -- videotex. The company believed that a program of research and experimentation would provide insight into the opportunities that videotex presents for electronic publishing and the distribution of information and transaction services to consumers and business.

As a result of the commitment to fully explore the possibilities of this new medium, Time Mirror Videotex Services was formed in January, 1981. In early 1982, Videotex America, a joint venture between Times Mirror Videotex Services and Infomart, of Toronto, Canada, was created.

Videotex America is the exclusive U.S. marketer of Infomart's videotex system software and services and intends to be a national videotex system operator in association with local partners in key markets across the U.S. Videotex America is also a partner in Grassroots California and Grassroots America, interactive videotex services for farm management.

To date, Videotex America has agreements to explore consumer and commercial videotex services with the following newspapers: ARIZONA REPUBLIC/PHOENIX GAZETTE, THE ATLANTA CONSTITUTION, THE COLUMBUS DISPATCH, DALLAS TIMES HERALD, THE DENVER POST, THE DURHAM HERALD, THE HARTFORD COURANT, THE LAS VEGAS SUN, LOS ANGELES TIMES, MINNEAPOLIS STAR and TRIBUNE, NEWSDAY, SACRAMENTO BEE, SAN FRANCISCO CHRONICLE and WASHINGTON POST.

(more)

In March, 1982, TMVS began a comprehensive nine-month field trial in 350 homes in Southern California to test consumer reaction to videotex services, and to gain experience in the operation of a videotex service. Based on the results of that field trial, TMVS plans to introduce a commercial videotex service, called GATEWAY, in mid-1984 in Southern California.

WHAT IS VIDEOTEX?

Videotex is an emerging, interactive information, communication and transaction system unlike any traditional broadcast or print medium. With the use of a telephone, television and hand-held keyboard, subscribers are linked to a virtually limitless number of electronic "pages" or frames of text and color graphics, stored miles away in a central computer. (See accompanying feature for a review of the proposed GATEWAY content.)

Subscribers, with little or no knowledge of computers, can select the information they want to see and read, when they want it, from index pages similar to those in a book. By simply entering one or two digits on the keyboard or by typing a special page name such as "news," "games," or "banking," the information is immediately displayed on their television.

The interactive, or two-way, nature of videotex also allows users to bank, pay bills, shop, order merchandise, book airline reservations, play games or communicate with one another by electronic mail.

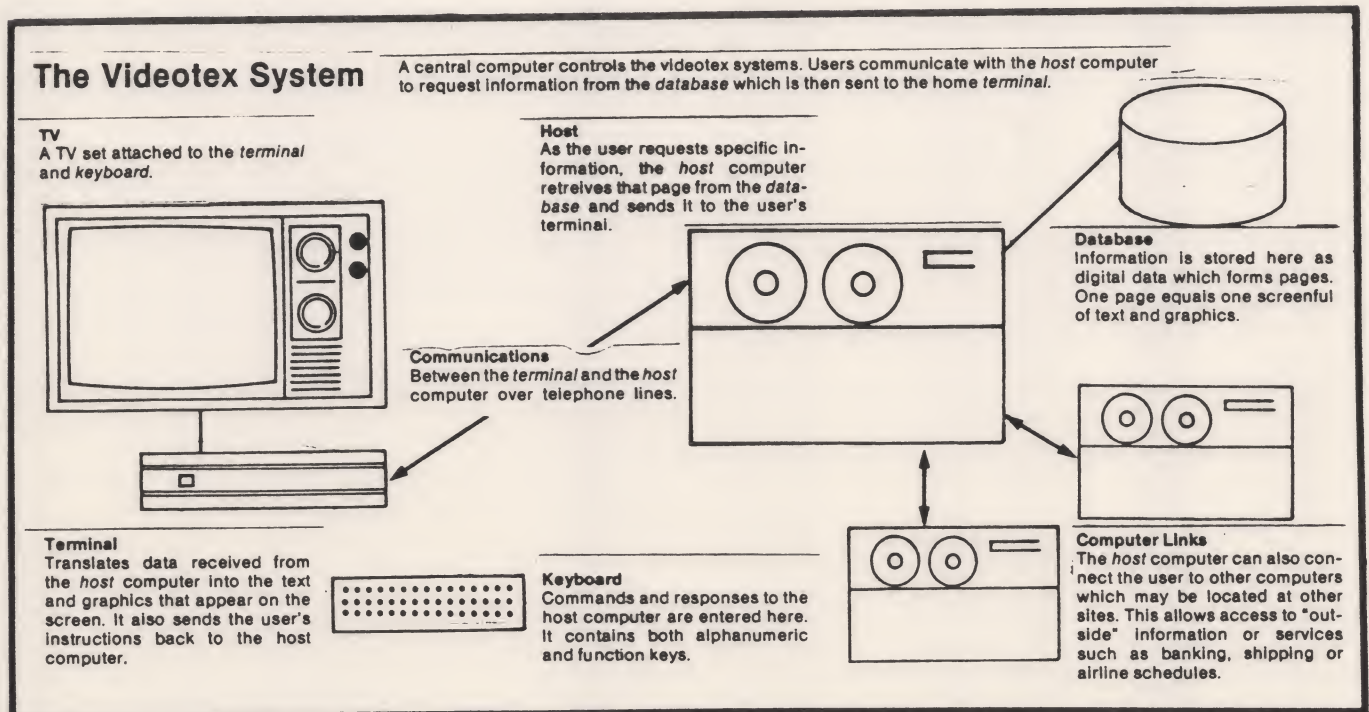
Like other media, videotex will be an advertiser supported medium -- more than half of a system operator's revenues will be derived from advertising. Subscribers are, therefore, exposed to selective advertising, but not as we know it today. Videotex advertising takes many forms, from brief messages and logos on index pages that direct users to a special part of the database to sponsorship of information or games.

(more)

Ads are also created very much differently from newspaper or even television ads. Special computerized frame creation terminals replace the art director's pencil, paper and drawing board. Using an electronic "mouse" or pencil, artists can create full-color, digital graphics that can be stored, retrieved, manipulated and transmitted at any time. (See accompanying feature for a more complete discussion of videotex as an advertising medium.)

A typical videotex system, such as the one used in the TMVS field trial, includes a host computer, home terminal and communications network. Subscribers "dial up" the host computer to see information from its database or to be connected with another computer through a "computer link."

The home terminal turns the signals into the text and graphics that appear on the screen.



(more)

FIELD TRIAL

For nine months (March 15, 1982 to December 31, 1982) TMVS conducted the industry's most extensive, live test of a videotex service. In all, 350 volunteer households (200 in Rancho Palos Verdes, California and 150 in Mission Viejo, California) had access to a 70,000-page information database, 200,000 words of daily updated news, home shopping and banking, and electronic mail services. More than 60 companies participated as Information Providers, Service Providers or Advertisers.

To select the volunteer households, more than 1,800 randomly selected families were surveyed by telephone. From those, 600 were invited to videotex demonstrations and then invited to volunteer for the trial. The final 350 homes were selected after extensive personal interviews.

Every member of each household received a confidential identification number and password to use when accessing the system. The TMVS host computer then recorded each subscriber's use of videotex during the trial period, and together with the outcome of focus group discussions and other interviews enabled TMVS to analyze consumer reactions to the information and services available through videotex.

The TMVS field test was significantly different from other videotex trials in a number of respects:

- o Terminals were kept in each household for a minimum of six months to determine usage after the novelty wore off.
- o TMVS was the first to impose charges. During the first part of the trial, service was provided free of charge. Midway through, subscription charges were imposed on the households that wished to continue receiving GATEWAY.
- o Simultaneous testing was done over telephone lines in Rancho Palos Verdes and cable lines in Mission Viejo, utilizing the two-way cable system owned by Times Mirror Cable Television.
- o Computer links were provided to third party computers such as Bank of America, Official Airlines Guide and Comp-U-Store.

(more)

- o Transactional services such as shopping and ticket ordering were also available.
- o Electronic mail and bulletin boards were offered which allowed subscribers to communicate with one another.
- o Classified ads from the LOS ANGELES TIMES were maintained and updated.
- o Associated Press wire service feeds were available instantly via satellite.

(See accompanying feature for the results of the field trial.)

KEY MANAGEMENT

JAMES H. HOLLY, president of Times Mirror Videotex Services, also serves in a dual capacity as president of Videotex America. He joined Times Mirror in 1980 and was responsible for the Southern California field trial.

Prior to joining Times Mirror, Holly was employed for 12 years with the Information Services Division of TRW where he was most recently vice president of systems and operations. Before joining TRW, he was special assistant to the general manager, American Express Card Division.

Holly is a graduate of Holy Cross College and Harvard Business School.

WENDELL L. JOHNSTON, vice president of marketing at GATEWAY is responsible for the GATEWAY launch to consumers as well as the advertiser support program.

Before joining TMVS, Johnston was associated with Mattel for 18 years handling a series of marketing and operations responsibilities both in the United States and Asia. Most recently he was vice president of marketing.

Johnston is a graduate of Iowa State and the Harvard management program.

JOANNE TAEUFFER, director, videotex services, Times Mirror Videotex Services, joined the company in 1981 and was instrumental in the conceptualization of the database for the Field Test in 1981. She is responsible for all organization and production of GATEWAY content.

Prior to joining Times Mirror Videotex Services, Taeuffer spent seven years in reporting and editorial positions at the SANTA ANA REGISTER and before that at the SANTA MONICA EVENING OUTLOOK.

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Taeuffer is a graduate of the University of California, Berkeley, and University of Southern California's Annenberg School of Communications.

JOHN S. WARWICK, director of business development of Times Mirror Videotex Services, has worked for three years at Times Mirror Videotex Services, helping to teach major clients how they can utilize automation systems to sell their products in the consumer's home.

Warwick, a graduate of Boston University and DePaul University, Chicago, has an extensive background in banking. Prior to joining TMVS in 1980, he served as product manager of home banking at First Interstate Bank and has worked at an ad agency as a consultant to banking organizations.

In addition, Warwick has had 5 years of experience with saving and loan leagues in California, conducting mass research on the prospects of electronic banking.

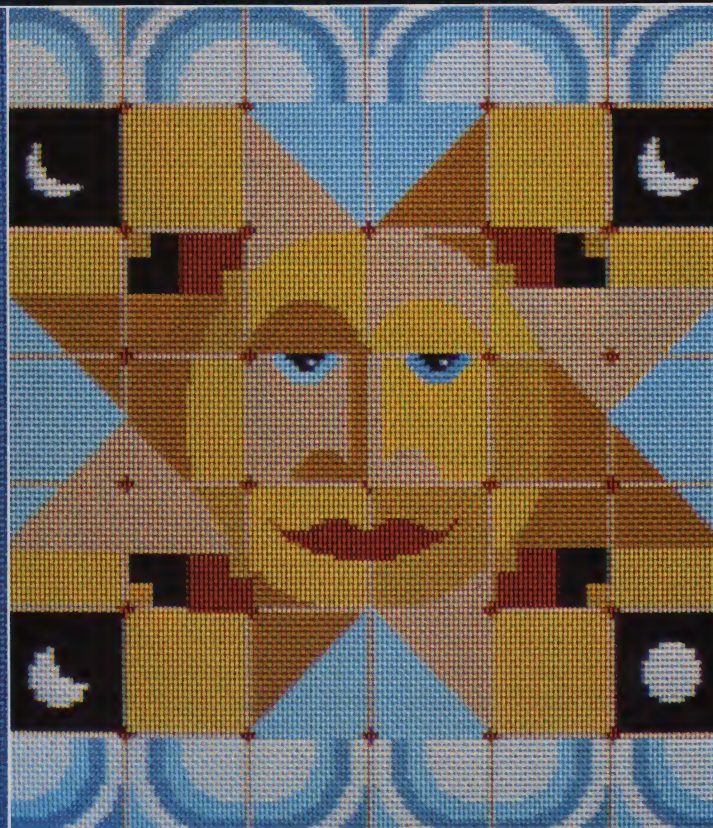
LOCATION TIMES MIRROR VIDEOTEX SERVICES
3100 South Harbor Boulevard
Santa Ana, California 92704
(714) 540-2515

CONTACTS Ms. Penny Jo Welsch
Manager, Marketing Communications
TIMES MIRROR VIDEOTEX SERVICES
(714) 540-2515
or
Ms. Blythe Egan or
Mr. Rick Hopelain
Manning, Selvage & Lee
1821 Wilshire Boulevard
Suite 400
Santa Monica, California 90403
(213) 829-1840

(more)

Gallery

A quarterly update from Times Mirror Videotex Services



Advertisers Reveal Early Sign-up Motives

Videotex Graphics: Art Form of the 80's

The Magic of GATEWAY Editorial Content

Major Retail/Subscriber Promos Planned



Major Advertisers Describe Plans for Early GATEWAY Participation

Advertisers and information providers from a wide variety of industries have signed up to participate in the GATEWAY launch this summer.

Gallery went to five of these far-sighted companies to find out why they decided to jump on the bandwagon in the early stages and how they're preparing for the launch.

Gallery: Why did you decide to participate in GATEWAY?

Russ Voisin, vice president and product director, Rand McNally, Chicago: We feel the videotex medium is an important evolving communication link to consumers. As a publishing company that's been in business for 127 years, we're always seeking new ways to reach the consumer. We decided to go with this first commercial venture so we could hopefully learn and grow with it.

Richard Walsh, automated development manager, Air France, New York: There are really two reasons. First, we want to research what's necessary to create the best information to evoke an inquiry or response from the users. We also want to be identified with a new and exciting product.

"We also want to be identified with a new and exciting product."

Richard Walsh
AIR FRANCE

Carol Gamm, senior project manager, Equitable Financial Services, New York: We are interested both in looking at a range of uses for new technologies and in taking a fresh look at developments in consumer marketing. We believe that to learn about

how videotex can be used, you have to be in the business. We want to be active players in videotex and the *only* way to do it is to participate.

"We want to be active players in videotex and the only way to do it is to participate."

Carol Gamm
EQUITABLE FINANCIAL SERVICES

Stephen Silverman, president, Essential Clothiers, North Dakota: We are already involved in Knight Ridder's Viewtron service and we wanted to get involved in GATEWAY early. There is so much work to be done in the initial stages, we think it's important to get going as early as possible. That's a key factor—learning what subscribers want. We know mistakes are going to be made, but we're trying to find the subscriber's "hot button" to buy shirts and ties and underwear from us.

There is so much to learn, we believe any company that waits for the technology to blossom will be 10 years behind the front-runners.

Jay Keller, vice president, interactive media development, Ticketron, New York, a division of Control Data Corporation: The high demand for sports and entertainment information in the Times Mirror field trial and other videotex services indicates that we should get involved now.

Gallery: How are you incorporating GATEWAY into your marketing/advertising plans?

Walsh: We've been involved in text creation and indexing for the past three years. Now we're making the transition to a user-friendly system

that links customers who want to know about our services.

We're extremely enthusiastic about adding videotex to our existing communication vehicles. It won't immediately replace other communication tools, but it does offer a unique two-way exchange with the subscribers.

We're sure many of our representatives—like travel agents—will eventually be involved with GATEWAY and we want to work with them.

Keller: We will initially offer information on theater, sporting events, ski areas and recreational park activities within the state of California. We will expand with information on events in other parts of the country as demand dictates.

"There is so much to learn, we believe any company that waits for the technology to blossom will be 10 years behind the front-runners."

Stephen Silverman
ESSENTIAL CLOTHIERS

Silverman: One thing we find so attractive about videotex is the opportunity to try different marketing approaches to see how they work. For example, we've already tried using videotex directly without support from other advertising mediums. With GATEWAY, we're going to try another medium, like print advertising. So, we can explore different or conventional media as support.

Voisin: Right now we're coordinating the sales promotional activities such as choosing the right program to sponsor and examining the appropriate products and services to offer the

Orange County subscribers. With our advertising department and ad agency, we're developing an approach that is complementary to the videotex medium.

"With our advertising department and ad agency, we're developing an approach that is complementary to the videotex medium."

Russ Voisin
RAND McNALLY

Gamm: We've looked at videotex as a unique medium. We're not just adapting one-way print ads, but developing advertising that takes advantage of the medium's capabilities.

Gallery: Are you doing any special staffing for GATEWAY?

Gamm: I was hired specifically to coordinate Equitable's videotex activities. I previously worked for a major bank on their home banking project. I have one other staff member who handles quality assurance and product development. We see the first year as a market research project.

Silverman: Essential Clothiers was set up specifically for electronic shopping. Essential Clothiers is an affiliate of Silverman's, a retail men's clothing store founded in 1913. As far as I know, we are the only corporate men's clothing store set up for videotex.

Since the medium is in the embryonic stages, we really don't know what kind of labor force will be required yet.

Gallery: What do you think of the videotex concept and where do you see it going in general?

Voisin: We think it has the right attri-

butes to gain more subscribers than it currently has.

Keller: It's a more efficient way to communicate from both the consumers and the sellers point of view. It improves on the one-way communication media methodology where the seller has control of when and where the information will appear.

The growth will be slow—it's a chicken/egg syndrome, changing the traditional way of doing things. But, by the 90's I think it will be used extensively.

Walsh: Air France, being a French company, is already familiar with videotex as a concept. Videotex is already very prominent in parts of Europe. Our company is extremely enthusiastic about adding videotex to its existing communication vehicles.

"It improves on the one-way communication media methodology where the seller has control of when and where the information will appear."

Jay Keller
TICKETRON

Silverman: We believe that videotex is going to play an important role in retail—when and exactly to what extent, we don't know. I think in our society today and in a 21st century society, people will be eager to perform certain types of shopping tasks via videotex. We don't believe it will replace shopping in stores, but it will become a conventional method.

It's so attractive to us because in a business like ours, we can be involved

in a system in California or Florida and literally grow geographically without establishing retail stores in those markets. To the GATEWAY subscribers, we're not a company in North Dakota: our location is one button away from the competition.

"To the GATEWAY subscribers, we're not a company in North Dakota: our location is one button away from the competition."

Stephen Silverman
ESSENTIAL CLOTHIERS

Gamm: We believe in the videotex industry in the broadest sense—incorporating the personal computer, etc. These technologies will be very important in the delivery of financial information and doing financial planning.

In the future, we think videotex will be a real area of competition, particularly among financial institutions.

Gallery: How would you describe the service you've gotten from Times Mirror Videotex so far?

Walsh: The staff has done a tremendous job on follow up. They are all very competent people.

Gamm: One of the advantages of GATEWAY is that the people have a lot of experience. It's helpful in that they can set the ground rules in advance and get issues out on the table for discussion before they become a problem.

You've done a good job of packaging the service, particularly the market research package. It's important for us to know what research will be available and when.

We Can

Mirrors that open as windows on the world have been a part of folk tales since the birth of imagination. No magician's private world is complete without a mirror in which he sees all that is passing.

With that vision came control... and power.

Videotex comes close to fulfilling the promise of magic. GATEWAY subscribers, with the push of a button, control what appears on their screen and they can command the host computer to do their bidding in a uniquely personal manner. Like a modern-day magician's mirror, the videotex screen can produce amusing pink bunnies, cite the price of gold or predict the next lunar eclipse.

GATEWAY's editorial package is stored in a network of host computers at its Santa Ana offices. Mainframe computers mean power. They communicate with the subscriber in tight bursts of code that deal effortlessly with colorful graphics, text, data searches and sophisticated software programs. At the center of this activity, within the host computer, lies the videotex equivalent of the brain—the database.

The content, structure and graphics style of the database determine the character of the videotex service. Is it accessible to the subscriber? Easy to use? Does it explain itself? Is it timely? Useful? Uncluttered? Interactive?

These were all issues raised by the 350 participants in Times Mirror's nine-month Field Trial in 1982. "Our philosophy of data structure and content came from the Trial," said Joanne Taeuffer, GATEWAY's Videotex Services Director. "Most of our database has a new look and content based on the lessons we learned."

There are other indications that videotex is emerging as a medium of its own, rather than an appendage of print, an "electronic newspaper." Much of GATEWAY's new editorial content, prepared by Information Providers under contract or by GATEWAY's staff, is being written and edited specifically for videotex. This requires a distinct, concise writing style and close attention to graphics.

Database design calls for an agreement

between the videotex service and its subscribers on what is logical, on which kinds of information and services should naturally fall within the same categories so that they can be readily found. Database structure is shaped like an upside down tree, with the most general concepts at the top. Subscribers should be able to move down each branch to the specifics and find the topics they expect.

Too many specific topics at the top of the tree can be confusing. GATEWAY's Main Index has shrunk from 21 selections during the Field Trial to only eight for its commercial service: News, At Home, On the Go, The Mart, Banking and Finance, Games, Your Desk and Help/What's New. Each choice leads to specifics. Lots of specifics, from the price range at a Newport Beach French restaurant to a run-by-run account of a baseball game—any game that is being played at any park in the country.

The host computer stores all this and helps the subscriber find it within the database. Routing conventions—arrows, number choices and special keys on the keypad—take you up and down the tree structure. Key words, such as FIRST AID, NEWS, HISTORY or CALCULATOR,

take you from one side of the database to another, completely by-passing the tree.

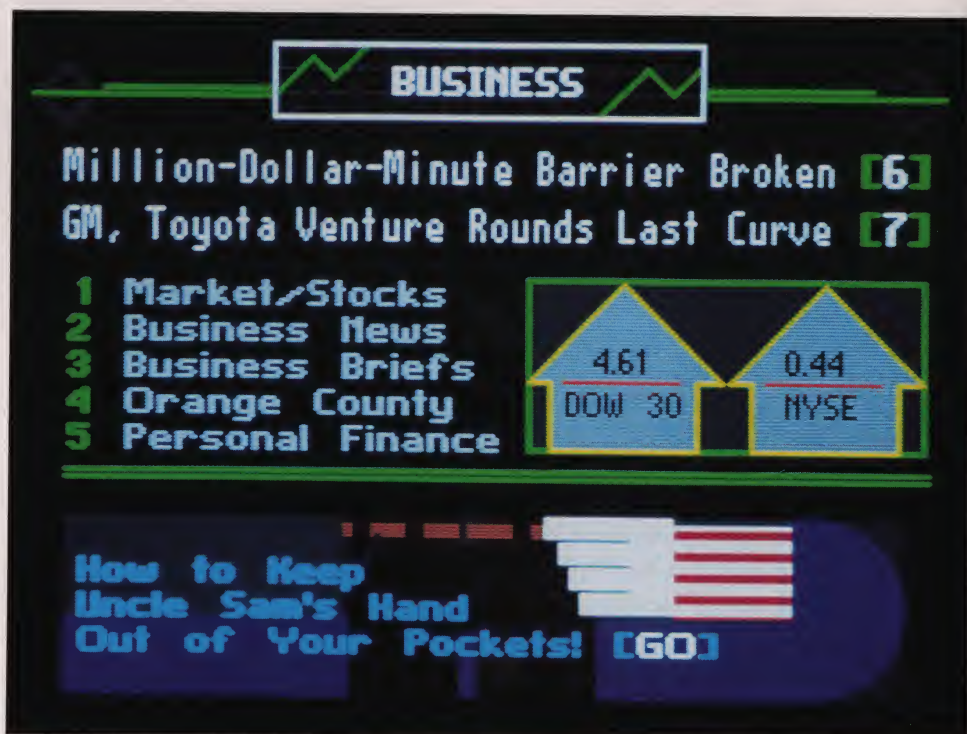
Here is how the editorial content within these Main Index choices will work:

News—Videotex news emphasizes real-time information, such as fast-breaking news, weather, sports scores and market activity. Of equal importance is the quality and reliability of the sources of news under contract to GATEWAY: the *Los Angeles Times*, Associated Press, United Press International, Reuters, *Los Angeles Times/ Washington Post News Service*, to mention a few.

GATEWAY's association with the *Times* means that most of the newspaper's content will be available to videotex subscribers the night before publication. *Times* editors will reformat, edit and summarize this material for electronic publication.

The GATEWAY newsroom also maintains a direct link via satellite with the Associated Press in New York. AP stories, edited especially for videotex, go directly into GATEWAY's page creation software and into the database. GATEWAY editors call attention to major stories by writing headlines on top index pages and linking those headlines to content.

This direct connection between an in-



Do Magic

by Larry Pryor

formation source and subscriber means that videotex news is consistently faster than all-news radio or television. Sports and weather reports also feed into the GATEWAY database via satellite. Stock and other market prices are reported at noon and immediately after the close of trading. Business news is updated throughout the 24-hour cycle.

Field Trial participants asked for breadth in news content. In response, GATEWAY is offering a Features section, which will emphasize entertainment personalities and the offbeat, and a section called Under 21, news for younger persons, with reports from *Rolling Stone* and *Children's Express*, a news service written and edited by children for children.

Since GATEWAY's commercial service will roll out in Orange County, California, local news will concentrate on that area. *The Times'* Orange County Edition will be supplemented by GATEWAY reporters and columnists, who will target coverage to the neighborhood level.

Interactivity works as effectively in news as elsewhere in the database. Subscribers can participate in polls on current topics, send electronic letters to the editor, ask for information or notify the news desk of

coming events in their community that they would like to see covered.

At Home—Magic mirrors in folk lore were amusing and unpredictable, as well as useful—all attributes of this section of the GATEWAY database. It covers activities performed without leaving the home; topics include food, TV listings, literature, health, gardening, consumer tips and education.

Adults will find a staff-written gossip column (What were those fits of laughter all about during private screenings of Bo Derek's latest film?) and an on-going serial about life in Orange County's fast lane. And if a daily television soap opera summary doesn't fit one's needs, perhaps a poem of the day, a summary of a new best seller, a garden tip or enlightening quote might.

The emphasis in At Home is on change and freshness. "The Field Trial research showed—and common sense tells you—that people get bored with anything static," said Richard Seeley, GATEWAY's editor responsible for the development of this section. While the emphasis is on change, he said, older material will be kept available to subscribers in an electronic archive section. "If you missed a good daily tip or a chapter of the serial, you can go back and find it."

The Field Trial participants said they wanted a wide range of information to be available on videotex. GATEWAY will carry an electronic Grolier encyclopedia, which will allow detailed tree sorting, such as from Great Britain to Prime Ministers to Lord Balfour.

Appropriately, the best magic in At Home is reserved for children. GATEWAY offers two "magazines" or graphics-laden packages of educational content—"Abracadabra" for two-to-five-year-olds and "The Whizz" for children 6 to 12. Both sections will encourage young persons to interact with the computer as part of an entertaining learning experience.

The pre-schoolers will have Harris, a pink rabbit in a black bow tie, to help them with words, numbers, objects and the more traumatic parts of life, such as the arrival of a new baby brother from the hospital.

Older children will have as their database tour guide a mercurial teenager, a math and computer whiz dressed in T-shirt and jeans, who whips through learning material like a meteor shower. When a point gets across (What does the O stand for in the oxygen element?), the Whizz disappears in a flash of pixie dust and who knows where his Astral Train will show up next in the database.

On the Go—Beyond one's home lies another logical sphere of activity—restaurants, movies, travel, entertainment, sports. This section covers these topics and, like At Home, encourages subscribers to let the host computer do the hard work.

The Restaurant Guide, for example, allows the subscriber to pick from more than 500 Southern California restaurants according to preference in cuisine type, location or first letter of the restaurant's name.

A Getaway Guide lists attractions—plays, shows, galleries—in nearby cities, such as San Francisco, Las Vegas and San Diego. For those who really like to get away, *Newsday* will provide a guide to New York City. And for those who like their attractions to be close at hand, GATEWAY will carry the comprehensive listings of events from the *Time's* Calendar section and About Orange County.

CONTINUED ON PAGE 7



Target Markets, Typical Viewers Major Thrust of GATEWAY Launch

Is there an "average" videotex viewer? Are there certain types of homes or geographic areas where videotex is certain to be successful?

In the Times Mirror Field Trial Study, a demographic profile of probable videotex subscribers was drawn. And TMVS has done extensive study to determine exactly where and how its GATEWAY service should be launched this summer.

The GATEWAY Persona

During the field trial, participants were generally in the 25-44 age bracket, with a median household age of 30 (and a mean age of household head of 43). Over 75% of the subscribing households in the Field Trial had children, with 43 percent having teenagers from 13 to 17 years old.

Although our average field trial household members were married (94%), studies showed that active singles under 35 and without children were also likely candidates as videotex subscribers as well.

Nearly all the male heads of household (84%) were in professional or managerial occupations. Many of their wives were also employed outside the home with 36% working full-time and 29% part-time. The mean household income during the study was in the \$40,000 to \$55,000 range.

And what of our trial subscribers' lifestyles? Mr. and Mrs. Videotex led very active lives and participated in a wide variety of activities. A whopping 98% went out to restaurants regularly, 96% entertained at home, 91% used the public library and 90% did their own gardening. Other activities included attending sporting events (88%), building do-it-yourself projects (86%), attending plays (83%) and participating in weekend or recreational travel (81%).

Electronic devices were old hat to our videotex clan: 74% owned microwave ovens, 50% were cable television subscribers, 46% used ATM machines, 41% owned video games and 24% owned a VCR. A small percentage of subscribers also owned personal computers and videodisks. (The National Electronic Home Service Test showed that many likely subscribers intended to buy per-

sonal computers, owned two or three television sets and telephones and spent \$20 or more on their phone bills).

Our videotex subscribers' shopping habits were interesting to note as well. They were heavy catalog shoppers—62% from the Sears catalog and 51% from other direct mail catalogs—they wrote more than 20 checks each month and frequently purchased merchandise by phone.

Onward to Orange County

When Walt Disney chose a sleepy county south of Los Angeles for the home of his imaginative "Magic Kingdom," he knew that one day this 782-square mile patch of orange groves and truck gardens would be a major residential and commercial center.

Today, Orange County has a population of over two million, is the sixth most populous county in the nation and the 17th largest retail market. And the growth shows no sign of decline. Over the next 10 years, the population is expected to grow at a rate of 23.4%, nearly twice the rate for California.

The demographics of Orange County

are just as impressive as its growth:

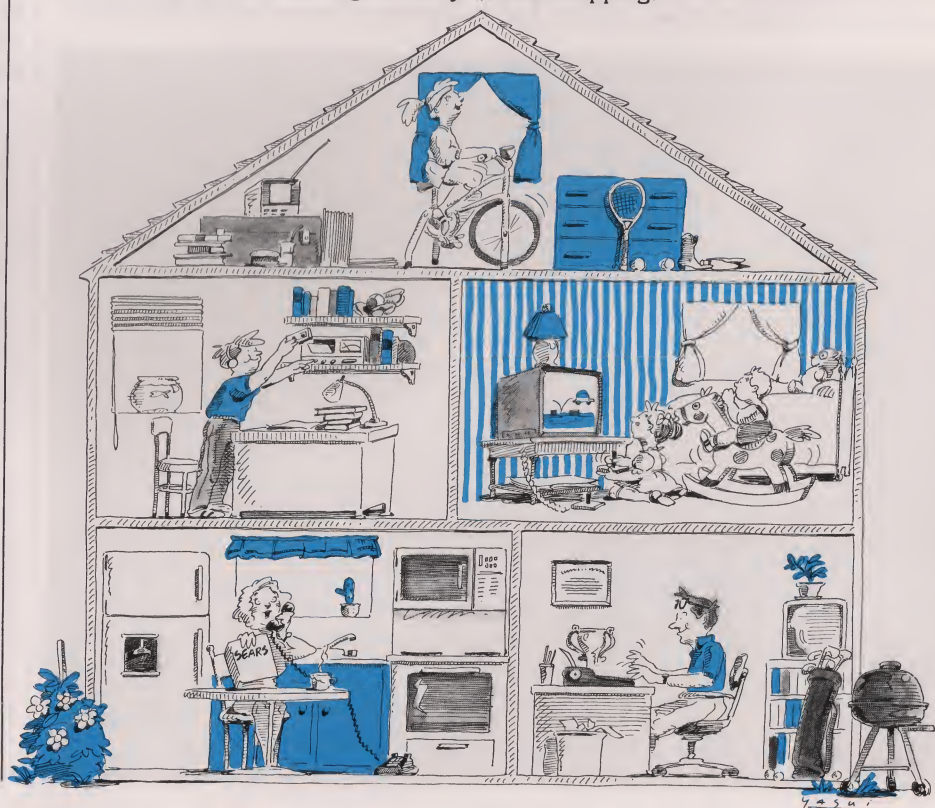
- Median Income - 3rd in nation
- Buying Power - 5th in nation
- Headquarters for seven major corporations with annual sales over 10 billion dollars.

In mid-1984 Times Mirror Videotex Services will introduce GATEWAY in this lucrative county.

Getting GATEWAY Subscribers

Major subscriber promotions begin this summer to interest consumers in GATEWAY. Among the unique attractions will be distribution outlets complete with AT&T Sceptre terminals where consumers can see live or taped demonstrations of GATEWAY.

According to TMVS president, Jim Holly, the consumer is ready for this unique new medium. "As we discovered during our extensive, nine-month field trial, consumers see GATEWAY videotex services as more than another computer game. They see it as a comprehensive, in-home source for news, information, services, entertainment and shopping."



Magic

CONTINUED FROM PAGE 5

Personal Finance—This section is designed for investors, executives, professionals and home budget managers. It has close ties with GATEWAY News, since events can have a pronounced effect on markets, jobs and home finances.

In addition to market news, Personal Finance has three other major elements: tax information from the Internal Revenue Service, specialized updates on government activity that affect jobs and finances and calculators to help with investment and budget decisions.

The IRS has chosen videotex as a way of helping people handle taxes and has prepared a vast library of forms and tax advice for use in this medium. GATEWAY will carry much of it. Other sections of Personal Finance will also have tax tips, the latest tax rulings and tax calculators.

Updates on government activity are provided by the Bureau of National Affairs, which specializes in information for doctors, lawyers, accountants, engineers, farmers and business executives. BNA will send reports on taxes, law, labor, agriculture and the economy. These will be edited by BNA for videotex and updated on both a daily and weekly basis.

The calculators are another example of the host computer being made available to make life easier. Programs developed by economists at UC San Diego and by the GATEWAY staff will allow subscribers to determine their tax bracket, how much money to set aside for retirement and how to invest it, how much debt they can absorb and what their monthly payments would be on a loan.

Your Desk—The messaging capabilities of videotex provide the subscriber with the ability to communicate with neighbors, local merchants, family and new GATEWAY friends. TMVS studied this new, largely unexplored phenomenon during the 1982 Field Trial. The findings indicated that with the help of messaging, the local community is redefined beyond geographical boundaries, extending as far as the videotex network permits—a kind of electronic village. GATEWAY subscribers hold “public” discussions over GATEWAY

bulletin boards, interacting and exchanging views with each other and forming new social groups.

Through the powers of messaging, the GATEWAY staff keeps abreast of subscriber interests and reactions. Such feedback often serves as the foundation for new sections or features, or reveals a new creative talent among the subscribers.

Your Desk brings GATEWAY's communications and personal storage capabilities together, presenting them to the subscriber in familiar, comfortable terms. Imagine sitting at your workworn desk. In front of you, is your In Box, where messages are left. Your Personal Calendar sits ready to display your important dates and appointments. A selection of stationery is available for your personal or business correspondence. A file drawer is at your side, ready for you to store important memos or special notes. Sound familiar? It's all at your fingertips, available at Your Desk.

Help/What's New—Keeping pace with GATEWAY is made easy with “What's New.” This feature makes keeping track of our dynamic, extensive database as easy as a keystroke. A brief description of a new feature and a direct link make exploring new material effortless. And, for those curious about what they can expect from GATEWAY in coming weeks, there's Coming Up, a sneak preview of new features. What's New is more than informative—it's fun and entertaining.

GATEWAY's “Help” is designed to answer subscriber's questions and make using GATEWAY as simple as using the telephone. A special Help Key on the Sceptre keyboard provides a shortcut to information geared to aiding the subscriber.

Help includes several directories—listings of information organized by subject, alphabetically, by advertiser or Information Provider—all derived to offer the GATEWAY user a tailored approach to finding information.

The total of these GATEWAY sections represent change, movement, surprise. Wave a wand and watch the magic.

Larry Pryor is GATEWAY's Managing News Editor

American Airlines and Auto Club Latest GATEWAY IPs

American Airlines and the Automobile Club of Southern California are among the latest companies to become Information Providers for GATEWAY's launch this summer.

Dallas-based American Airlines will provide GATEWAY subscribers with a variety of travel-related information including schedules of American flights from Los Angeles, Long Beach and Orange County airports.

Information about the American Advantage frequent flyer program and the American Admiral Clubs will be available. And, since even the most seasoned travelers need some help from time to time, a section of travel tips will help with information such as how to ship your pets by air, luggage regulations and maps showing the fastest ways in and out of airports.



The Automobile Club of Southern California, who was a major Information Provider during GATEWAY's 1982 Field Trial, has also signed on for the commercial launch.

Three Auto Club divisions, Sales Development, World Travel and Domestic Travel, will provide information.

Applications will include an insurance rate quotation calculator which will enable subscribers to input information about their auto insurance needs and receive a price for insurance coverage from the Auto Club.

There will also be a special weekend travel quiz to plan weekend outings according to interests, distance and budgets.

Painting Electronically: Artists Add "Puck" to Palette

by Rich Seeley

Take a look at the tools at a typical artist's studio.

There among the brushes and tubes of paint, the pens and the pastels, you may find something called a frame creation terminal. It's a new tool for modern artists. It is used to create the graphics that appear on a television screen which is hooked up to a home videotex terminal. With a frame creation terminal, an artist can electronically paint pictures on TV.

GATEWAY artists are using the Frame Creation System (FCS) from AT&T. The terminal with a keyboard and video display monitor looks very much like a personal computer. The artist sits at the terminal holding a puck: this is not a hockey puck, it is a hand-held device about the size of a pack of cigarettes. It is a remote control for drawing on the FCS screen.

The artist runs the puck over a pad beside the terminal and moves the cursor (that blinking light on the screen.) As the cursor is moved along by the puck, it draws lines similar to those produced by a child's Etch-A-Sketch, except that with the puck, the artist can make circles and curves as well as straight lines.

But the frame creation terminal has the power to do much more than simple line drawings. The artist can select from an extensive palette of colors displayed at the top of the screen like a paint store's color chart. The colors can be mixed electronically to form different shades and hues just as oil paints can. Using the puck, the artist can change background and object colors with a flick of the wrist. He can shrink or enlarge parts of his illustration until it suits his design. In minutes, he can accomplish what an illustrator working with pencil and paper would take hours to do with countless erasures, redrawing and much crumpling of paper.

What the frame creation terminal has created is computer art, the first major new art form to emerge since the invention of photography in the 19th Century.

How have artists reacted to this new tool?

Sometimes with skepticism and trepidation, usually followed quickly by fascination and enthusiasm. Kim Foote, art director for Times Mirror Videotex Ser-

vices, remembers that she was afraid to touch a frame creation terminal the first time she saw one.

"I thought, gee, this is a real interesting thing to do," she recalls. "But do I have to use that machine?"

Three years later, she loves that machine.

Larry Burchard, senior designer for GATEWAY, had never used anything more electronic than an overhead light before coming to work at the Times Mirror project.

But with no previous computer training, he learned to draw on a television screen, the way he had learned to draw on paper and canvas.

"If I can do it, anybody can do it," Larry says. "I'm to the point where I would like to have a terminal in my home. It's like working in pen and ink, you see what you can do while you're doing it."

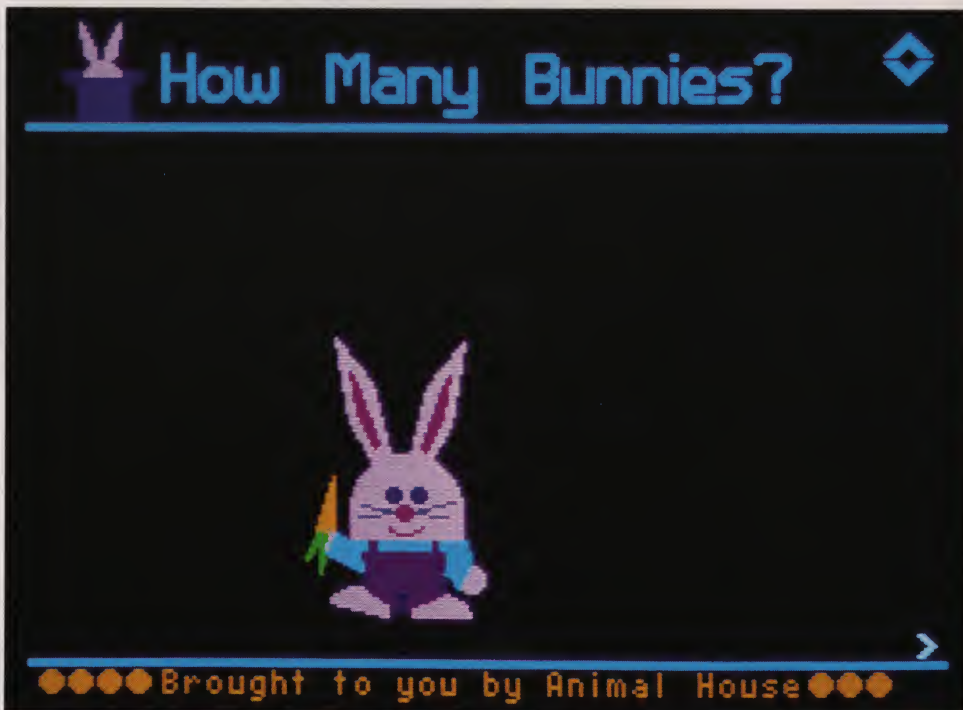
"People think they're not technically-oriented but it's not that hard to learn," says Abby Ehmann, a GATEWAY designer who worked at Bell Labs where the frame creation system that TMVS is using was developed. She compares the computer art form to working in pen and ink. "You're working in the finished product all

the time," adds Kim.

There are differences, however, between videotex art and that of any other medium. The artist can use the sequence in which the computer builds the graphic on the screen to add animation to an illustration. In the GATEWAY children's magazines, one of the characters, Harris the Magic Bunny, pops out of a top hat as the index appears on the screen.

As much fun as such a complicated graphic is, videotex designers have learned that there are limitations. In sections designed for children and in greeting cards, the animation effects of a long build-time may be cute. But on everyday applications such as news or information pages and indexes, subscribers quickly lose patience if they have to watch the same graphic

GATEWAY artists work with advertisers to determine graphics, colors and optimum build-time for their message. The TMVS Field Trial showed that children enjoy the suspense of build-time for characters like Harris the Rabbit, shown here in various build stages.



slowly build everytime they go to check a sports score or a stock market quote.

GATEWAY designers have found that both illustrations and advertisements must

be kept simple so the build time doesn't seem to drag to the user. Research indicates that people expect computers to do things quickly and the more they use a

system the more irritated they become with anything that appears to slow things down. In working on graphics, designers are conscious that less is often better. The fewer bytes of computer memory that a designer takes, the quicker it will build. "You work something up to 6,000 bytes and then get it back down to 500," says Abby.

Another limitation of frame creation art is that the resolution on the television screen is more fuzzy than fine. Designers have found they can't do details that are possible in pen and ink or oils. They can't recreate portraits or do product shots of cars. They cannot do technically perfect illustrations because they take too many bytes, take too long to build and the resolution is too limited.

"This is more of a graphics medium rather than an illustrator's medium," says Larry.

"It's a symbol medium," adds Kim. "You have to keep it simple."

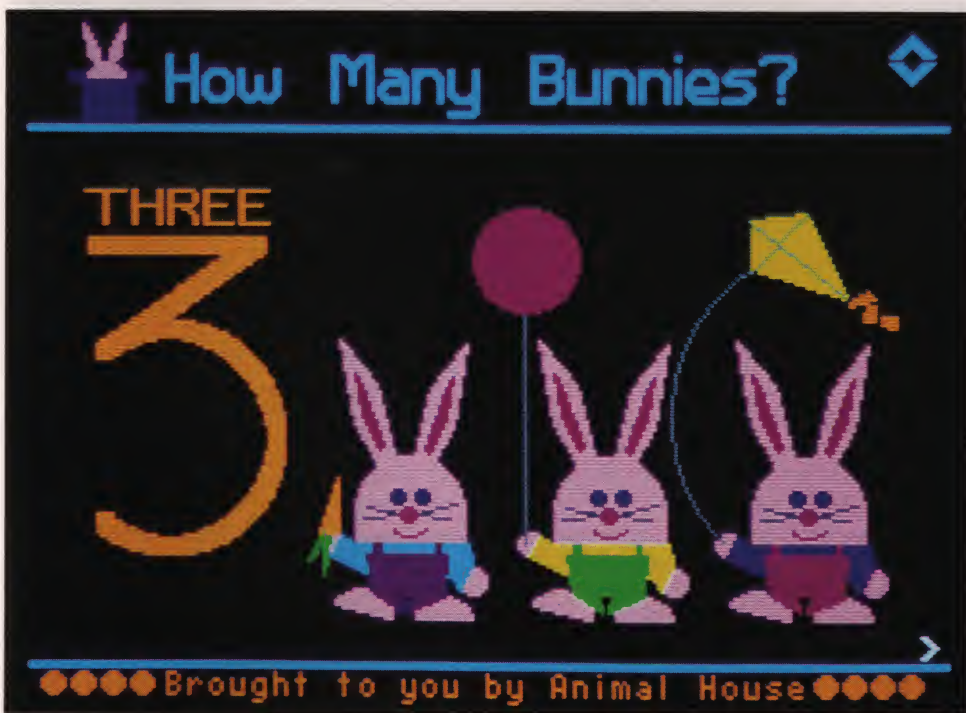
The selection of colors must also be kept simple. The colors do not blend together easily as they do in a watercolor wash. And some colors smear each other when used together. Using yellow and green together tends to make the yellow look a little greenish and the green look a little yellow.

However, the technical limitations of current videotex technology do not limit the artist's imagination. Just as an illustrator working in pen and ink can create an entire world out of black lines and white paper, videotex artists can translate complicated concepts into striking graphics.

For the GATEWAY almanac, Kim designed a one-page illustration which daily shows the phases of the moon, the rising and setting of the sun, the best times for planting, whale watching, grunion running, fishing and the rising and falling tides.

"Working with computers sounds like you don't have creativity," says Kim, "but actually you have more. Videotex is not a stationary art form. It's always moving."

Kim and the other GATEWAY designers believe the next generation of artists will graduate from art school thinking of the FCS as just another tool in the artist's studio. Rich Seeley is a Senior Editor for GATEWAY



Grassroots America Announced

Grassroots America, a new videotex service for the agribusiness industry, is scheduled to begin operations in the Delaware and Maryland area in late 1984.

The service is a partnership between Videotex America and three major farm cooperatives, Agway, Cenex and Southern States Cooperative.

Grassroots America will be based upon the successful Grassroots service developed and operated in Canada by Infomart.

Videotex America will represent Grassroots to national advertisers of consumer goods and services.

GATEWAY, Grassroots & Teleguide on View at Videotex '84

Videotex America's Videotex '84 exhibit will feature live demonstrations of the GATEWAY, Grassroots Canada and Teleguide Toronto services. Visitors will have an opportunity to use one of Teleguide's public access terminals. In addition, Kim Foote, GATEWAY Art Director, will demonstrate page creation capabilities using the AT&T Frame Creation System.

Information Providers, Advertisers Continue to Sign Up for GATEWAY

American Airlines, Automobile Club of Southern California, Benjamin Moore Paints, Continental Bank of Illinois, Essential Clothiers, Kodak, and Ticketron are among the latest information providers and advertisers set to participate in

GATEWAY's first year of operation.

According to Hugh Wagner, VP Marketing for Videotex America, "We are beginning to see an increase in the interest level among major companies. They are beginning to see some of the potential of videotex and realize that this is the time to become involved."

New Marketing VP for GATEWAY

Wendell Johnston has joined GATEWAY as vice president, director of marketing, where he will be responsible for all marketing activities. Johnston reports to James H. Holly, president, and will direct all marketing efforts including subscription sales and advertising sales. Johnston comes to GATEWAY from Mattel.

Videotex America Opens Manhattan Office

Videotex America's Eastern Region has opened a second sales office to service the growing list of clients in Manhattan. Toba Levy, senior sales executive, will staff the new office located in the Chanin Building at 122 E. 42nd St., 17th Floor, New York, New York. Phone: (212) 687-1740.

TMVS Offers The Videotexbook

As part of a direct mail campaign designed to increase advertising companies' awareness of videotex, TMVS has published "the Videotexbook, a guide to videotex marketing." The 47-page report examines the history of videotex and its potential as a marketing/advertising medium.

Representatives from advertisers of consumer goods or services may obtain a copy by writing to: John Suttlemyre, Manager Account Sales & Service,

GATEWAY, 3100 S. Harbor Blvd., Santa Ana, CA 92704.

VideoFinancial Services Names President

William S. Harris has been named president of VideoFinancial Services. Harris will be responsible for directing, on a fulltime basis, the management and growth of VideoFinancial.

Harris is a former senior vice president at Banc One in Columbus, Ohio, one of the joint venture partners in VideoFinancial. Other partners are: Southeast Banking Corp., Wachovia Corp., Security Pacific Corp., The Chase Manhattan Corp., First Chicago Corp., and State Street Boston Corp.

VideoFinancial will provide home banking services to local financial institutions which will offer information and banking services to their customers through GATEWAY.

VA Adds Local Affiliate

The Columbus Dispatch is the latest newspaper to join Videotex America's Local Affiliate Program. This brings the total number of affiliates in the program to fourteen. As part of the VA Affiliate Program, publishers will jointly study the potential for videotex in their market area and have an "over the shoulder" view of GATEWAY's Southern California roll-out.

VA Director, Business Development

Edwin A. Moss has joined Videotex America as Director, Business Development. Moss was previously with Times Mirror Cable Television where he was Assistant to President, Ralph J. Swett.

In this new position, Moss will be responsible for the VA Local Affiliate program and will oversee VA's involvement in Grassroots America and Grassroots California.

GATEWAY's Retail Plan Aimed at Today's Changed Shopper

You can't pick up a magazine or newspaper without reading about the day when people will be able to do more with their television than watch "Dynasty" and the Super Bowl. The time has come. It's happening now. Today.

Remember your own school days when you had to write a composition on a certain subject and needed an encyclopedia for the information? When you got to the library you had to wait to use the "A" book because someone had to use it to look up "anteaters" and you needed it for Athens, Greece. Videotex children needn't wait anymore. By dialing in a remote computer using an ordinary television and telephone line that is connected to a small box, everything from anteaters to zebras can be retrieved. No waiting. No fuss.

While retrieving information so a theme paper can be written is important, some of the most important aspects of videotex to consumers are the retail applications, such as finding out information about store sales, bargains and mall events. For retailers—particularly in malls, this might indeed be the important leverage needed to be even more competitive in a market.

Today's Changed Shopper

Today's shopper has developed new buying habits that are forcing retailers to reevaluate how they can attract them to buy. No longer are sales (as important as they are) the driving force to get people to buy. Today's shopper is better informed and demands value for the merchandise purchased. Secondly, today's shopper, still predominantly female, has become a major part of the work force. Labor statistics show that women account for over 50% of the male/female labor mix.

What does this mean to retailers? Shoppers have less shopping time per shopping trip, so retailers will have to work smarter for the shopper's dollar.

According to an article in a retail trade magazine, *Shopping Center World*, the average shopping time in a mall is around 60-70 minutes and that time is spent in maybe two or at the most, three, stores. Except on weekends, it seems inevitable that the heady days when shoppers spent hours browsing in stores are coming to a close.

In addition to the shopper spending less time shopping, other non-mall retailers really took Horace Greeley's "Go West..." advice to heart. As the Markhams, Jones and Platts settled into the communities, other retailers—mall competitors—followed. Suddenly, sophisticated strip centers, off-price stores and large convenience centers sprung up overnight, surrounding the malls and literally headed the shoppers off right at the pass.

GATEWAY's Retail Program

Beginning this summer Times Mirror Videotex Services will be offering a GATEWAY retail videotex program to selected malls and mall merchants in Orange County. These programs are specifically designed to help malls and merchants deal with these competitive and shopper conditions by giving them applications that will keep shoppers informed and motivate them into the malls and stores. They can also enhance and expand the malls' existing trade areas as in the case of Orange County where many of these areas overlap.

These programs will not only allow this group to be involved with videotex at low cost and with a minimum of risk, but new communications avenues can be explored—ways that can help malls and merchants get above the "noise" and become noticed by the ever-elusive, desensitized shopper.

According to Frank Lee, the TMVS senior sales executive who will be marketing these programs, retailers expressed concern about home shopping. While home shopping is certainly within

the operating scope of videotex and good for certain product/service categories such as concert tickets, travel arrangements and mail order, nothing can replace the need to support the see-touch-smell behavior.

Focus on Communication

The focus of videotex for retailers will be in communications, which can be classified into three major areas: 1) sales promotion; 2) personal selling; and 3) pricing/merchandise mix.

No doubt the objective of sales promotion is to build and hold traffic in the stores. GATEWAY can help retailers do this, initially by hitchhiking as add-ons to present media, like newspapers and broadcast. The advantage here is that videotex subscribers can, at will, hunt for and locate a specific store's message for the day. This might include unique sales items that may not have appeared earlier in the newspapers or on a radio broadcast.

Shoppers often complain that they pick up an item and can't find a salesperson to answer their questions or, worse yet, complete the sale. GATEWAY can help stores impart more information on merchandise so that the shopper will be better informed. The sales staff can spend time collecting the money!

The last, but important area, GATEWAY can directly help retailers with is pricing and merchandise mix. The name of the game in retail is how much, how fast and at what profit margin can products be moved through the retail system. Videotex will offer retailers the chance to evaluate the optimum operating conditions that will produce the best margins.

Videotex has the potential to become one of the most effective tools retailers will have to use to meet the changing buying habits of shoppers. Today's retailers will have to work smarter for the shopper's dollar. Today isn't a bad time to start...with GATEWAY.

President's Message

Videotex America Partnership Adds Punch for Future of Videotex Industry

There are times when those of us who have been involved in the industry would like to look into one of our videotex screens, punch in "1990" and see what things will look like.

We're believers and we know videotex will work. It's a matter of refining the form and mixing the right ingredients to make it happen. At Videotex America, the Times Mirror-Infomart partnership, we have spent much time and effort sorting out all the factors and we think we have a tremendous beginning.

Videotex America is somewhat unique in its approach to the videotex market. First of all, our partnership includes proven success—Infomart is the leading operator in Canada and a major developer of software on the international scene. Second, Videotex America has established a national sales organization, representing multiple videotex system operators to national advertisers. When GATEWAY services are operating in multiple cities, Videotex America will offer the national advertiser one-stop shopping by representing systems in many markets at once.

We're starting out with individual systems. There's GATEWAY, the consumer service that will launch in southern California this summer. There's Grassroots America and Grassroots California, commercial systems for the agribusiness community. And Teleguide, a public access system now being introduced in its first U.S. application in San Francisco.

These three systems are interrelated. Teleguide helps to warm up the con-

sumer audience by building awareness and involving advertisers. Grassroots serves a vertical market with specialized information needs so that the advertising is dedicated to providing that market's needs. And GATEWAY, the in-home consumer service reaches a broad consumer audience with a range of information, services and advertising.

Our plan is to roll out GATEWAY in southern California first. After we have attained pre-set objectives, we will immediately roll out throughout the greater Los Angeles metropolitan area. At the same time, GATEWAY will be ready to move into other markets—both Times Mirror newspaper markets and Videotex America affiliates.

The Videotex America affiliates program was set up with the thought that once we've invested the time and money to roll out the first service, the investment required to start up a second, third or fourth service will be considerably less. Costs of marketing to advertisers are one example of this. Once an advertiser's been sold to try videotex, the first time and is happy with the results, they'll be happy with more.

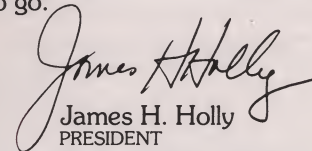
The affiliates program was designed to enable other newspapers in key markets across the U.S. to jointly explore opportunities in videotex. Newspapers are excellent candidates for videotex systems because they already gather and have access to extensive local news and information. They have established relationships with advertisers in their market areas and they have a high level of visibility and credibility among consumers.

To date we have agreements with newspaper publishing companies in fourteen markets including our newest affiliate, *The Columbus Dispatch*. Our objective is to assist these publishers in operating consumer videotex services in their local markets. Videotex America will provide technical expertise, consulting, a database content of national interest and national advertising. The local publisher adds local content, advertising and market knowledge.

A significant part of Videotex America's overall strategy is to set up services and technologies to allow us to become a player in multiple markets. We have presented a specification for a user terminal Service Reference Model. We've published our TRAILS protocol for computer links and we're working on a concept for a videotex system that has standards implications. Finally, we are freely talking with the manufacturers of personal computers who are working on PC software and hardware with NAPLPS capabilities.

Everybody agrees the consumer will use videotex and everybody is watching advertisers to gauge their acceptance and participation.

Finally, we believe that when videotex has been proven successful from the point of view of the information provider and the consumer, it will explode—expanding to many markets in a short time. When the explosion comes, Videotex America is ready. With our affiliates, software, content, sales organization and know-how, all packaged, ready to go.



James H. Holly
PRESIDENT
Videotex America

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GATEWAY is a registered service mark of Times Mirror Videotex Services.

On The Cover. A new generation of artists is being born with videotex. GATEWAY artists have added "pucks," keyboards and terminals to their painting palette. These seasonal examples of videotex art were created by GATEWAY art director Kim Foote and senior designer, Larry Burchard. Visitors to the GATEWAY booth at Videotex '84 can see the results of the electronic artist's first hand.

Gateway.
There's nothing
like it on TV.





Introducing Gateway. It's going to change the way you look at your television.

Welcome to Gateway.sm The incredible new communications service from Times Mirror.

Although you use your television to see Gateway, there's nothing like it on TV.

In fact, the only thing they have in common is the box they come in.

Now, right at home, you can read the news, hot off the wire. You can pay a bill. Send a note. Shop the stores. Plan a party. Do your banking. Buy tickets. Teach your kids.

With Gateway you'll save time, and manage it better. You can improve the ways you save, invest and spend your money. And you'll have an unlimited resource for answers to thousands of questions.

It's all possible because Gateway uses a brand new technology called videotex. Something you'll be hearing a lot more about.

In fact, the management consulting firm Booz, Allen & Hamilton estimates that videotex will be in 30 million homes in the next 10 years. Here in Orange County, you can have it today.

Using Gateway is simple. All you need is a television, a telephone and a Sceptre[™] videotex terminal made by AT&T.

The Sceptre dials a local number, you type your secret password on the keypad and you're in touch with an incredible package of information and special services. All designed to work for you in hundreds of ways.

Gateway is run by Times Mirror, experts when it comes to communicating. Their experience comes from publishing

ventures like the *Los Angeles Times*. Plus cable television and broadcast TV systems across the country. Now, their expertise places the latest advancement in communications technology at your command.

Now you can be in touch with the dozens of people, services and companies you deal with every day. Your bank. Your favorite stores. The airlines. All ready to make your life easier and more fun through Gateway.

Communicate with your television.

Sure, everyone talks to their TV. But until now, all you got was the sound of your own voice bouncing off the walls. And programming that someone else decided you should see.

Now you've got Gateway and you're in control. And you can communicate with your TV to answer your questions, keep you informed, help organize your finances and your time.

The capabilities are almost unlimited.

There's news, sports, finance, recipes, movie reviews, lessons, travel plans, bargains. Even instructions on how to fix a leaky faucet.

Take news. You don't always have the time to sit through an entire broadcast just to hear the one bit of news you need. With Gateway you've got the news when you want it. On demand you can get top stories, local, national or world news, in depth or in brief. And it's always the latest report.

The sports section is so complete it's almost like being at dozens of games at once. Scores are updated for some games as they're being played, every quarter, every inning. Gateway covers major sports and most of your favorite teams, from professional to your local high school.

Full-color weather maps will help you decide how to pack for out-of-town trips and give you the latest local



forecasts. There's even an almanac.

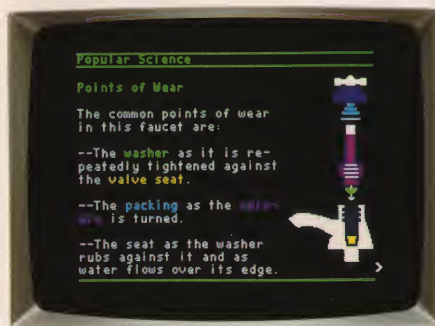
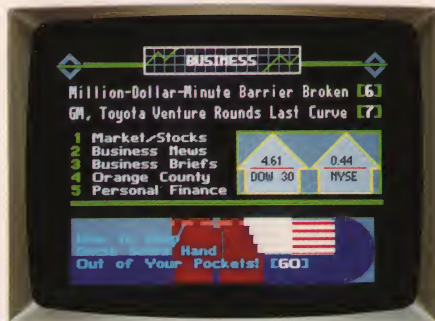
Gateway has a wealth of other up-to-the-minute information, too. Like a television programming guide. Stock market reports. Election results.

Like you, Gateway has interests other than news.

Say you want to plan the perfect evening out. Just check Gateway's restaurant guide, then take a look at the movie reviews or concert schedules.

Gateway can lend a helping hand around the house, too. In the House and Gardening section you'll find hundreds of tips, from how to replace a broken window to the perfect time to plant asparagus.

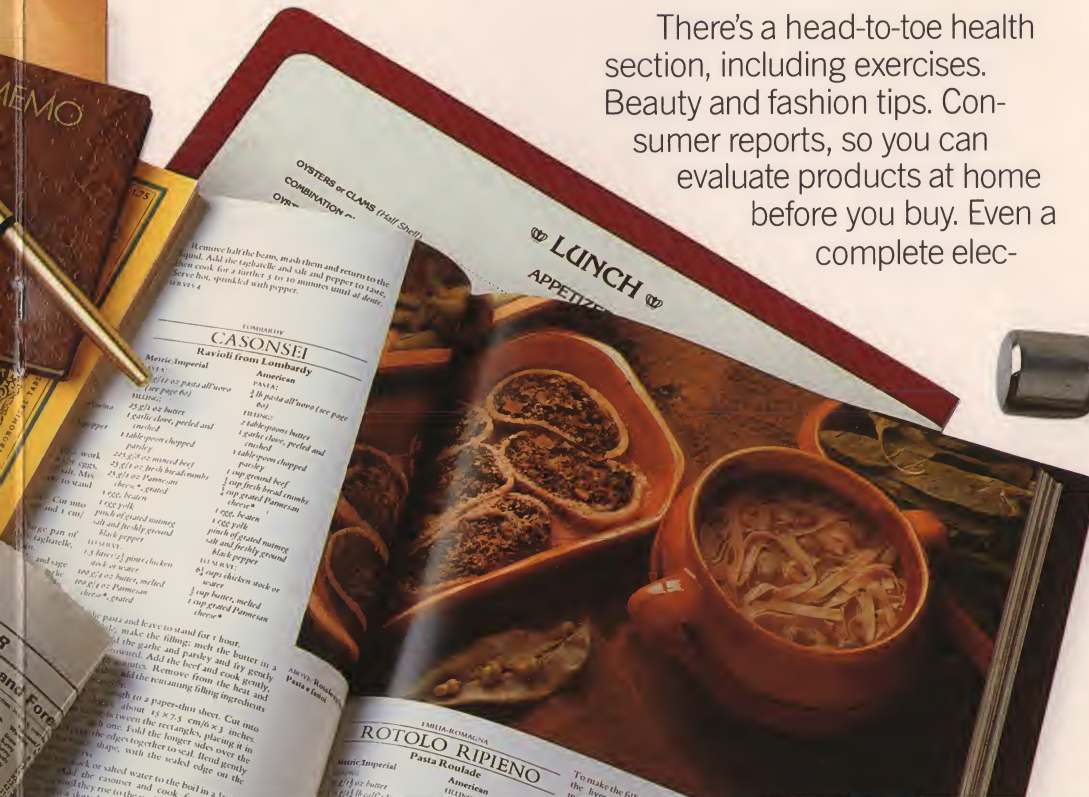
When unexpected company calls and there's only an hour to put together a terrific dinner, check The Electronic Gourmet. It'll give you all the recipes for a full-course meal, tailored to your taste, using what's already in your refrigerator.



There's a head-to-toe health section, including exercises. Beauty and fashion tips. Consumer reports, so you can evaluate products at home before you buy. Even a complete elec-

tronic encyclopedia.

Starting to get overwhelmed? Well think about this. What you see here is just a fraction of the ways you'll use your TV to communicate when you've got Gateway.



Never before on television.

Usually when you have a lot of things to do, you have to do a lot of running around.

There are errands at the bank. Gifts to buy. Cards to send. Trips to plan.

Your Saturdays are gone in a flash.

But now you can do all those chores like never before. Fast and easy, any time you need to.

Right on your television through Gateway.

You'll find the same good companies you deal with every day. And because they're on Gateway, they can give you even better service.

Going to the bank is a good example. With Gateway's home banking you can keep a close eye on your checking account balance. Transfer funds from

checking to savings, or vice versa. Pay bills and see which checks have cleared.

What's more, Gateway opens up into a personal financial planning center, so you can manage your money more efficiently. There's a personalized stock watch. Year-round tax tips. Even a home budgeting program.

And when you're ready to spend your money, just sit down and go shopping through Gateway. Mom will never need to know that you didn't leave your chair to shop for her birthday present.

Your favorite stores are on Gateway, so you can shop for the best products and best values. And there are catalogs



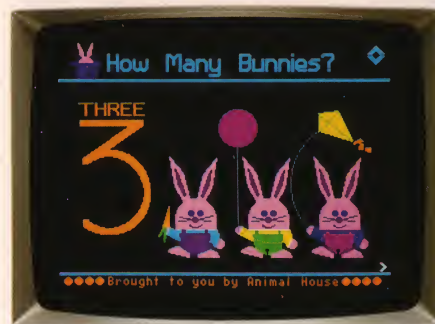
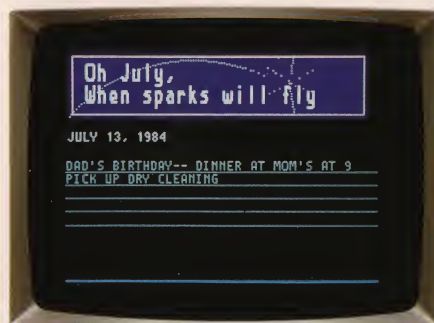
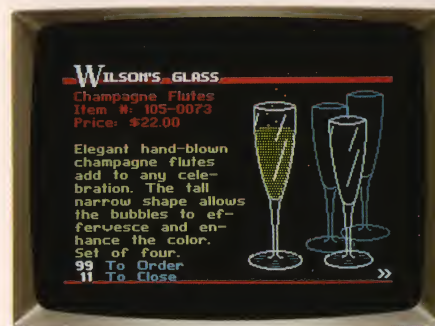
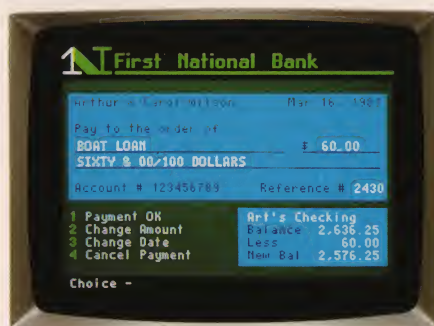
to electronically flip through with merchandise graphically displayed in full color along with complete descriptions.

You'll avoid long lines, too, when you use Gateway to buy tickets for everything from concerts to theater to sporting events.

At home there's usually a special place where you take care of the paper work. Gateway has a modern version—your own electronic desk. There's a filing system, an in box, a 14-month calendar and an address book. What's more, you can even send notes and greeting cards via electronic mail to your friends who are Gateway subscribers.

And when you're leaving home, check Gateway's airline schedules and tours to make the most of your trip. You'll spend less time on the arrangements and have more time to enjoy the results.

After the chores are done, Gateway is ready to play. There's an ever-changing collection of brain teasers, strategy games and challenging puzzles to keep you on your fingertips.



Gateway has taken special care of your kids, too. With exclusive features for every age. Like electronic magazines such as *Whizz* and *Abracadabra*, full of lessons, quizzes, games and stories, so kids can laugh and learn.

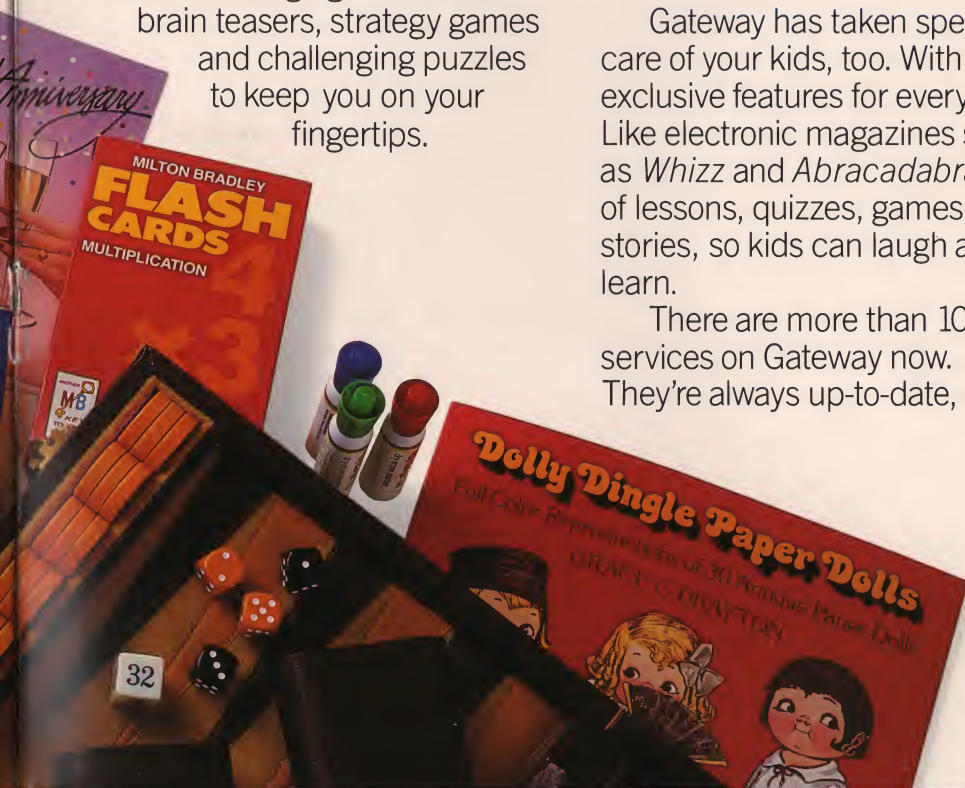
There are more than 100 services on Gateway now. They're always up-to-date, and

more are added every day.

But what's more important is what you can do with Gateway. Save time, save money. And make your life a lot easier and a lot more fun.

But before you can do all that, you've got to do one thing first. Come see a Gateway demonstration and become a subscriber.

You'll see. There's nothing like it on TV.





Times Mirror Videotex Services
3100 South Harbor Boulevard, Santa Ana, California 92704 (714) 540-2515

News Release



Release Date: July 18, 1984

Contact: Penny Jo Welsch (714) 540-2515
Times Mirror Videotex Services

Blythe Egan (213) 829-1840
Manning, Selvage & Lee

Times Mirror Videotex Services
3100 South Harbor Boulevard
Suite 200
Santa Ana, CA 92704
714/540-2515

GATEWAY TOPS MILLION DOLLAR MARK

SANTA ANA, CALIF., July 18, 1984 -- James H. Holly, president of Times Mirror Videotex Services, announced today that more than \$1 million in advertising commitments have been received for the first year of GATEWAY[®] Southern California, the consumer videotex service scheduled to start this September in Orange County, Calif. GATEWAY is an affiliate of Times Mirror Videotex Services.

In making the announcement, Holly said, "This puts us right on schedule with our projections for national advertising sales. We're especially encouraged about the caliber of advertisers we've attracted and the amount of resources they are willing to invest in this new medium."

GATEWAY is an interactive home information service in which subscribers utilize their own television set and terminal to access an almost limitless source of electronically stored information and services -- including news, shopping, electronic mail, home banking, games and educational programs.

An introductory package price of \$29.95 per month will be offered to the first 2,000 subscribers in Orange County, Calif. This price will include the rental of an AT&T Sceptre[™] terminal and access to the GATEWAY service.

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"GATEWAY has been designed from the start as a versatile information and communications medium," said Holly. "We found during our 1982 field trial that GATEWAY subscribers value the advertising messages and product information they receive, and they liked the two-way form of communication they were able to establish with advertisers. Advertisers who have signed with us realize that."

Among the national advertisers GATEWAY has signed to date are American Airlines, American Express, Ticketron, Kinney Shoes, Citibank, Rand McNally, Equitable Life Assurance, The Automobile Club of Southern California and Montgomery Wards.

GATEWAY is represented to national advertisers by Videotex America. Hugh Wagner, vice president, marketing for Videotex America stated, "It will take years of experience to effectively utilize the full potential of videotex as a marketing tool. Advertisers involved with videotex will develop an entire new way of marketing. There is no doubt, those waiting for the mass market to develop will find themselves behind."

Videotex America is a partnership between Times Mirror Videotex Services and Infomart of Toronto, Canada. Infomart is the creator of Grassroots and Teleguide, two videotex services now operating in Canada and being developed for U.S. markets.

Times Mirror Videotex Services is a subsidiary of the Times Mirror Company, a multi-media communications company which publishes major metropolitan daily newspapers in Los Angeles, Denver, Dallas, Long Island, and Hartford, Stamford and Greenwich, Conn.

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WHAT IS VIDEOTEX AND DO CONSUMERS REALLY WANT IT?

Findings From Times Mirror Videotex Field Trial

When a company introduces a new product much research and development goes into its pre-introductory stages. Videotex, not only just one new product, but a series of products, presents a whole new set of questions. While the individual products presented through videotex are not new, the method in which a consumer uses or purchases them is revolutionary.

Videotex, an interactive information and transaction system, uses a keyboard, telephone and a television set which displays information that comes from a central computer. Users can select information from index pages such as late-breaking news, shopping guides, banking services, electronic mail, games and educational programs by typing a key word or page number on their keyboard. The two-way nature of videotex allows users to bank, pay bills, shop, book airline reservations, play games or communicate with other users. The ultimate marketing question is, "Is there sufficient demand in the market to warrant the introduction of the product?"

In 1982, for a period of nine months, 350 households in Southern California had access to a 70,000-page information database, 200,000 words of daily updated news, home shopping and banking, and electronic mail services. The Times Mirror Videotex Services host computer recorded each subscriber's use of videotex. This together with focus group discussions and extensive in-person interviews, allowed Times Mirror to explore the following questions: Who is the audience for this product?, How much will they use it?, and What do they want and need? Here is what they found.

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Who is the Audience?

The typical videotex user is married, has children living at home, is in their late 30's to early 40's, is well-educated, and has a high income. A user leads an active life, owns many electronic devices for the home, and is a heavy mail and catalog shopper. The videotex user subscribes to many magazines, uses automated teller machines, and doesn't find videotex too technical.

How Much Will It Be Used?

A majority of the participants in the GATEWAYSM test used the videotex service several times a week, and it was used most often by the male or female head of the household. Because the Times Mirror GATEWAY terminals remained in each household for a minimum of six months to a maximum of nine months, the company was able to measure the usage after the initial novelty had worn off. The important factor of cost for usage was introduced at the midway point, and it was found that about two-thirds of the users said they would subscribe at an expected future price. About half of the likely future subscribers said they would purchase a videotex decoder at \$400.

The Field Trial findings certainly indicate a strong, sustained consumer need and use for videotex. Usage increased steadily after an expected dropoff from the novelty effect, and despite the experimental nature of the service, a large percentage of participants remained when pricing was introduced, rather than drop the service.

What Services Do Consumers Want?

Trial results revealed that participants desired a considerable array of information and services to keep them informed, save time, money and to some degree entertain. The services subscribers liked best and used the most were as follows in ranking order: Fun and Games; Electronic Mail; News; Shopping and Banking; Videotex Help (a guide to new programs on the system and directory of electronic mailbox numbers); and Entertainment. All of these together accounted for between two-thirds and three-fourths of all usage.

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It is interesting to note that electronic mail and access to a section called the Bulletin Board surpassed the first category, Fun and Games, in the last few months of the test. Electronic mail, a way for videotex users to send messages to other members of the videotex community, arrives in seconds directly on the television screen. The GATEWAY electronic bulletin board was even credited with having sold an automobile when one user placed an ad that was answered by another subscriber in the trial.

There were times when news outperformed other categories in terms of daily access. Predictably those were the occasions when newsworthy and earthshattering events were taking place, i.e., the Falkland Islands crisis and the 1982 elections. A majority of participants agreed that videotex is a great source of late breaking news, especially when there are more than 3,000 pages of news available daily, updated continually from Associated Press, the LOS ANGELES TIMES and local newspapers.

Videotex all boils down to the unique advantage of saving time. When it came to shopping services, users agreed that videotex would save time grocery shopping (54%), shopping for non-grocery items (60%), and getting information on shopping -- where to go for what (69%).

An actual 53% of all households in the trial placed orders through GATEWAY and the dollar amount was significant considering the limited merchandise available. A very large percentage of consumers (73%) wanted more stores and merchandise to be offered on videotex. The goods users wanted to buy included: entertainment tickets (94%); hard to locate items (79%); specialty catalog items (76%); airline tickets and reservations (75%), bargain and sales items from major retailers (69%), small appliances (40%); services such as plumbers, gardeners, etc. (32%); and soft items such as groceries, and sundries (31%). The actual ease with which an order could be made was also found to be extremely important.

John Warwick, director of business development for Times Mirror Videotex Services said, "We now have a good idea of what kinds of advertising people respond to and the type of merchandise they are likely to order. Participants like communicating directly with merchants."

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In-home banking, made possible in the test through a link with Bank of America's computer center in Los Angeles, ranked as the second most useful service of videotex. Participants were able to check their account balances, pay bills, and transfer funds between accounts. Just as with automated tellers, consumers had no fear of a lack of privacy or security in their transactions, and a full 87% expressed complete confidence in the system.

Times Mirror Videotex Services president James H. Holly said, "We're beginning to see a clear picture that shows the consumer will subscribe to videotex for more than one reason, rather than a single purpose. Given the right combination of news, shopping, transaction, communication, learning and games programs, our research shows that there is a real market for this product."

Market research experts in the videotex industry agree. According to Booz, Allen & Hamilton, within 10 years, 17 to 30 million U.S. households will have home information systems. The consensus of opinion is that videotex services will save time paying bills, getting shopping information, and help keep up with local, national and world news.

Videotex has been considered by some people as an electronic replacement for newspapers and magazines, yet surveys show that the trial participants consider videotex a "comprehensive home information system," not just an electronic newspaper.

Walter Baer, director of advanced technology for Times Mirror, said, "When every new technology from radio to television to cable came along, everybody predicted the death of newspapers. It hasn't happened yet, and the teletext and videotex won't do it either."

Videotex is a new product; a new medium. Close analysis of the industry and careful assessment of results from their own field trial has led Times Mirror Videotex Services to believe that there will be a strong consumer acceptance of videotex.

Consumers in the Orange County area of Southern California are in for a treat very soon. Based on the findings, Times Mirror plans to introduce GATEWAY to Southern California consumers in mid-1984.

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Videotex: Not Traditional Advertising INTERACTIVE MEDIUM CALLS FOR NEW ADVERTISING APPROACHES

"Those who get involved with videotex in its early stages will have the experience and knowledge to gain a marketing edge over their competitors."

McCann-Erickson
Advertising Agency

Newspapers. Magazines. Radio. Television. Billboards. All tried-and-true methods of reaching consumers with advertising messages.

But there's a new advertising medium that at this time has limited reach, no guaranteed frequency and requires an entirely new set of creative skills, yet has the potential to dramatically change the way advertisers sell products and services and the way consumers obtain information and make purchases.

It's called videotex -- an in-home, two-way, information and entertainment medium that is ideal for consumers who have less and less leisure to perform many routine tasks. Simply, videotex electronically links consumers to a computerized library of text and color graphics via their telephone and television set.

Like newspapers or other traditional media outlets, videotex is an advertising supported medium. So in addition to news, banking, shopping and games, subscribers are exposed to selected advertising that is an integral part of the content.

But unlike traditional advertising, the messages are not programmed, there's limited animation, no sound and subscribers seek out the information and advertising when they want it, on demand.

However, Times Mirror's videotex service, called GATEWAYSM, provides advertisers the opportunity to get involved in and learn the new medium while the costs and risks remain low through a number of unique advertising options, including:

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- o Index Advertising

The "Sign-on" page, which appears on the screen after the subscriber has entered the required identification information, provides space for an advertising message or prompt that directs the user to additional information pages supplied by the advertiser. Index pages, or "electronic menus," are present throughout the database to assist subscribers in locating and viewing the information that is of interest to them. These highly viewed pages provide advertisers with media opportunities similar to those for the "Sign-on" page.

- o Electronic Mail

Each member of a subscribing household has their own individual private "electronic mail box," and can receive messages from other subscribers or "electronic direct mail" from advertisers. Advertisers using the electronic mail option can order custom-designed stationery that can include a company logo or other message-related graphics. The actual text message can be entered directly by the advertiser, using a videotex terminal, onto the company stationery and electronically mailed to all subscribers or to a select group of households.

- o Advertiser Bulletin Board

The bulletin boards are a special section within GATEWAY where advertisers can list product news, special prices, discounts or any newsworthy information. The main feature of the advertiser bulletin board is that advertisers can change the information content directly through their own videotex terminal.

- o Sponsorship of Special Sections

Advertisers can purchase the right to sponsor certain special sections within GATEWAY such as news, sports, weather or entertainment. The sponsor name and/or logo will appear on each page of a sponsored section for maximum exposure to the service user. The sponsorship message may be a direct advertisement or prompt directly to the advertiser's information database. Advertisers who sponsor a section of the database have the right of first refusal for the following 12-month period.

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- o Sponsorship of Games
Advertisers can also opt to sponsor a package of games, such as Mirror Dungeon, Gomoku or Maze. Games, as one of the most used segments of the database, provide advertisers high visibility.
- o Page Storage
Advertisers can store an unlimited number of pages of information a buyer might need to make a purchase decision or information which might contribute to raising consumer awareness about an advertiser's products or services. These "electronic brochures and catalogs" complete with graphics are stored for a monthly fee.
- o Ordering Task
The standard ordering task allows the advertiser to retrieve orders generated by GATEWAY by means of electronic mail, regular U.S. mail or through an ASCII terminal. Advertisers using the ordering task will pay a monthly maintenance charge and a nominal fee for each order received. The ordering task allows advertisers to fulfill orders quickly and receive fast feedback on what sells.
- o Action Task
This option involves software designed to handle such things as calculations, product or service quizzes or the generation of special responses for research purposes. Advertisers will pay a monthly maintenance fee, plus additional charges if custom programming is required. The action task gets subscribers actively involved in the advertiser's material, provides them instant feedback on questions in the advertiser's area of expertise and helps the advertiser generate qualified leads.

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Customized Research and Creative Services

The primary benefit to advertisers in early involvement with GATEWAY will be the extensive computer-generated research data. Advertisers will have the option of purchasing quarterly research reports that basically indicate who looked at what, when and for how long. Videotex is the only medium that can provide advertisers that level of precise viewership. The research reports, which will include statistics on overall system use, average use per household and individual subscriber, usage by demographics, advertising, page accesses, share, and reach, can provide advertisers with a more thorough understanding of the subtleties of the medium.

One of most unique aspects of videotex is in the creation and display of the graphic elements. The art director's pencil, paper and drawing board have been replaced with a computerized frame creation terminal. Using a "mouse" or pencil, electronic drawing pad and video display terminal, artists can create full-color, digital graphics that can be stored, retrieved, merged with text, manipulated and transmitted at any time.

In addition, the graphics do not appear on the screen in their entirety at one time. Rather, they build section by section over a period of seconds. Therefore, the videotex artist has two new graphic elements that exist in no other medium and that can be used creatively -- the pattern or sequence of the build and the length of the build.

GATEWAY frames or pages can be created by advertisers or their advertising agencies, if they are equipped with frame creation terminals. Text and graphics can be created on these terminals and transmitted across the country, directly to GATEWAY's central computer and instantly become part of the database.

Advertisers not equipped with frame creation terminals can purchase creative services such as layout, design, copy and graphics from Times Mirror Videotex Services. The company is staffed with experienced account executives and a complete creative department.

Following are two samples of 12-month GATEWAY advertising packages:

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SAMPLE 12-MONTH DIRECT MARKETING PACKAGE

3 main index page ads	
4 sign-on page ads	
4 A-level index page ads	
6 B-level index page ads	\$1,470.00
50 catalogue pages, stored	\$2,400.00
1 ordering action task	\$2,400.00
Purchases totaling \$7,000.00	\$70.00
Electronic mail	
based on 120 messages to own bulletin board,	
24 messages to public commercial boards, 4,000	
direct mail messages and 70 hours of Gateway SM	
access	\$5,790.00
Production	
(catalogue page creation costs include quarterly	
updates)	\$19,000.00 (est.)
Total	\$31,130.00 (est.)
	does not include
	videotex terminal cost

SAMPLE 12-MONTH IMAGE AND CONTENT PACKAGE

4 main index page ads	
5 sign-on page ads	
4 A-level index page ads	
4 B-level index page ads	
6 C-level index page ads	\$2,000.00
300 information pages, stored	\$14,400.00
1 ready-made game, sponsored	
(each game is individually priced)	\$6,000.00 (est.)
1 action task for the sponsored game	\$2,400.00
Research Reports	\$16,000.00
60 hours of Gateway SM access	\$900.00
Production	\$17,500.00 (est.)
Total	\$59,200.00 (est.)
	does not include
	videotex terminal cost

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MORE THAN NEWS, WEATHER AND SPORTS

If your faucet leaks, you call a plumber. If you have to trim down, you enroll in an aerobics class. If you need a new power drill, you go to the nearest Sears store. If you want to transfer funds, you drive to the local bank. And if you need some entertainment, you go to the neighborhood arcade.

Not anymore. With the advent of videotex, a new information, transaction and entertainment system, all this and more can be done without ever having to leave home.

In mid-1984, Times Mirror Videotex Services will offer consumers in a selected portion of Orange County, California, the opportunity to buy, sell, bank, trade, learn and play using their own telephones and television sets.

The new videotex service, called GATEWAYSM, connects each subscriber to a computerized library containing thousands of pages or television screens of information and graphics that can be accessed on demand 18 hours a day, 7 days a week.

For less than \$30 per month, subscribers will have access to a myriad of services including:

- **BANKING**

Through a direct link or "gateway" to local banks' computer centers, subscribers can electronically pay their bills, transfer funds between checking and savings accounts and check balances on their checking, savings or bank card accounts.

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- SHOPPING

Subscribers can electronically order merchandise from major local and national retailers, charge the purchase to their credit cards and have the items delivered to their homes or to another address if it is a gift. A full-color graphic of the merchandise is displayed on the screen together with a complete product description including price. Subscribers also have access to a variety of information on merchandise available at various other retail outlets.

- NEWS

The content of the LOS ANGELES TIMES, specially selected for videotex, will be available to subscribers the evening before it is published.

Subscribers can also monitor breaking stories as they are released by the Associated Press and other wire services and fed via satellite into the videotex system. Coverage includes local, state, national and international stories, as well as complete business, sports, financial and weather information.

- TRAVEL

Subscribers will be able to check worldwide flight schedules and then book airline, hotel and rent-a-car reservations.

- EDUCATION

A variety of educational programs have been designed for all age groups. Preschool and elementary school children can practice math and reading skills. Junior high and high school students can learn geography or a foreign language. Users enrolled in selected college courses may take tests on their videotex terminals. A complete text of an encyclopedia is also instantly available.

- ENTERTAINMENT

Subscribers can purchase tickets to concerts and sporting events and charge the purchases to their credit cards. They can also browse a restaurant guide as well as movie and television listings and read the latest reviews before making a final decision.

- FUN AND GAMES

Games, quizzes, contests and stories will challenge and amuse a broad range of ages and interests. Some games, such as Mirror Dungeon, Gomoku, Maze or Blackjack are played against the computer while others, like Kalamazoo and Backgammon, let users compete against each other.

- CONSUMER AFFAIRS

The system will include thousands of pages of consumer-oriented information including plumbing repair, wardrobe planning, plant and pet care advice, home decorating and party tips, first aid guidelines, camping and fishing trip tips, physical fitness programs, emergency phone numbers, horoscopes and the community yellow pages.

- ELECTRONIC MAIL

Subscribers can send messages or specially created video greeting cards to each other. The messages are received in each user's "electronic mailbox." Videotex bulletin boards will allow users to advertise a garage sale, sell a car, announce a community meeting or organize a party. Advertisers will also be able to target electronic direct mail to subscribers who have expressed a previous interest in certain merchandise.

But do consumers really want more than news, weather and sports? According to Times Mirror they do.

The content for GATEWAY was carefully developed and tested during a nine-month field trial conducted in late 1982. The results of that trial in 350 homes in Southern California indicated a strong demand and interest in such a service. As a result, GATEWAY will become commercially available in 1984.

So the next time you need to figure how much wallpaper you need to paper your den, the answer may be as close as your television set.

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News Release

Release Date: April 15, 1984

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TIMES MIRROR VIDEOTEX SERVICES GATEWAYSM SYSTEM --TECHNICAL OVERVIEW--

The GATEWAY videotex system provides interactive database transaction and information services to its subscribers via NAPLPS videotex terminals. The advanced graphics and color capabilities of the NAPLPS standard contribute significantly to the emergence of videotex as a new and unique consumer information services medium.

The GATEWAY host computer configuration includes Digital Equipment Corporation (DEC) VAX-11/780 processors with DEC as well as non-DEC controllers and peripheral devices. AT&T Frame Creation System (FCS) terminals linked to the host computer are used for the production of NAPLPS database pages. The software side of the GATEWAY operation is based on ITSS-2, a comprehensive videotex executive and application system developed by Infomart. ITSS-2 runs under VAX/VMS, DEC's standard operating system for the VAX-11/700 series computers.

ITSS-2 performs the functions of a complete teleprocessing/transaction monitor. It handles all data traffic on the GATEWAY communications network, and controls internal routing of individual transaction messages between terminals and host application programs.

(more)

Another major integral component of ITSS-2 is TDBS, a complete database subsystem designed by Infomart for the specific requirements of videotex. Applications created under TDBS allow the home consumer to search and access large-scale databanks in a simple, intuitive manner. Page retrieval is possible by individual page number, by symbolic page names with multiple aliases, or by application built-in sequencing logic presented to the user in the form of menu selections. TDBS page updating can take place while the database is in live operation.

ITSS-2 offers a number of generalized videotex applications that will be used in the GATEWAY service. A comprehensive messaging subsystem provides store-and-forward capabilities by which the users can send and receive electronic mail via private mailboxes. Message broadcasting via public or closed-group bulletin boards is another form of messaging application that will be available.

The ITSS-2 wire services subsystem performs automatic page creation, editing, and indexing for contents that continuously flows in on permanent links to external news and financial wire services.

The GATEWAY subscribers can avail themselves of transaction services and databases residing on third-party systems via an ITSS-2 initiated host-to-host link that is essentially transparent to the user. Many financial services, shopping services, and nationwide information services will be available to GATEWAY users through this facility.

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TMVS has selected the AT&T Sceptre videotex home consumer terminal for use by the initial customers when the GATEWAY service opens in Southern California. This second generation version of the AT&T terminal introduces a number of functional enhancements, and conforms to the final version of the ANSI NAPLPS standard and service reference model for videotex.

The Sceptre terminal consists of a decoder unit and a lightweight handheld keypad featuring a full alphanumeric character set, editing keys, and fixed as well as programmable function keys. A standard home television receiver serves as display device for the videotex pages. In the initial phase of GATEWAY operation, the Sceptre terminal will communicate with the host over dial-up telephone lines with 1200/1200 bps full duplex link operation. The modem required is an integral part of the Sceptre terminal.

The GATEWAY user terminal provides automatic service dial-up and logon through prestored telephone numbers and logon sequences. A "call waiting" feature alerts the user to incoming voice calls while the line is in use during a videotex session.

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